First Alert®

digital
analog
wired
wireless
recording

SECURITY CAMERA CATALOG

Electrical Market

digital | analog | wired | wireless | recording

Volume 1

WHY FIRST ALERT SECURITY CAMERAS?

Over 50 Years of Safety and Security Experience

For more than half a century, BRK Brands, Inc. has made the home-safety and security products that make your job easier. These products are marketed under the First Alert, OneLink, Family Gard and BRK brand names. Our products are built to the highest standard which has earned the company a leadership role in the home-safety and security product categories. We are committed to serving our customers, from you, the professionals who install our products, to the families who count on them.

First Alert/BRK has introduced a line of Security Cameras targeted towards the small business owner and high-end residential market. Until now, your customer's options have been limited. Spend thousands on the design, installation and maintenance of complicated security systems or sacrifice quality and features for other entry level systems. First Alert Security Cameras have all of the important features your customers need for their small to medium security monitoring requirements.

First Alert Quality Features:

- Complete packages - Easy to install kits
- Indoor/outdoor cameras with night vision
- Passive IR motion detection
- DVR recording systems with large storage capacities
- Expandable storage with pre-wired SATA cables inside the wired systems
- 400 TV lines for clear resolution
- Wired and wireless kits for added versatility
- Wired systems are Internet/mobile phone ready

Perfect for:
High-end Residential - New or Remodel
Light Commercial
Small Business/Retail
Small Warehouse

HOW TO CHOOSE YOUR CAMERA SYSTEM

How many locations do you need to protect?

First Alert Security Camera systems are available in systems that can accommodate up to 4 or 8 cameras. For most residential and small business applications this is sufficient for covering a front and rear entrance along with several inside locations like the cash register, storage area, key warehouse locations or residential interior rooms.

Wired or Wireless?

Wired Systems: Wired systems provide the most secure camera monitoring and are perfect for new construction or anywhere access to an open cable run is available. In addition, the wired systems supply power to the cameras from the cable so no electrical outlets are required near each camera.
Wireless Systems: First Alert wireless systems operate on a secure 2.4 GHz digital signal using frequency hopping spread spectrum (FHSS) technology. This FHSS technology is highly resistant to narrowband interference and is difficult to intercept. However, as with any wireless transmission, it can be subject to interference, interception or jamming under certain conditions. Wireless signals can be significantly reduced depending on the structures the signal must go through. Concrete, copper and metal pipes and heating ducts tend to reduce the signal length. In addition, the camera needs to be plugged in to a 120V outlet near the camera. If no outlets are available they will need to be installed first.

What is the maximum distance you need to cover?

Longer runs may require an upgrade to RG59 Coax cable. First Alert kits ship with economical AV cable that is designed to work well up to the length of cable provided, usually around 60 feet. If longer distances between camera and DVR are required, you will need to upgrade to RG59 Coax cable. We provide several lengths up to 300 feet. In addition, if you need to run cable for in-wall installations, then you may require fire rated cable, FT-4/CMR UL approved for in-wall installations.

Do you need to monitor your system via the Internet?

Our wired systems have the capability of being monitored using any internet connection or via a smart phone. For internet access you must have a static IP address. This is usually available from your internet provider at an additional cost.

Do you need audio surveillance?

Our wireless systems and some of our wired cameras have the capability of audio surveillance and recording. Be aware that audio surveillance in some states is illegal or requires permission from one or both parties to record someone's voice. Laws are also different from residential vs. commercial applications. Be sure to check with state or local authorities in your area for laws that may affect your installation.

Indoor/Outdoor Wired Analog Color Camera Recording Systems

- Web-ready & mobile phone compatible DVR system – H.264 video quality
- 320 GB media data storage (Can add up to 1TB additional hard drive)
- Indoor/outdoor night vision color cameras (IP65 rating)
- Passive IR motion detection
- 400 TV lines for clear resolution

Includes:
DVR System, Cameras (4: SKU# 4800 or 8: SKU# 8800), remote control, USB mouse, 60 ft. BNC AV cable per camera, Power Supplies (cameras and DVR), Splitter Cable, Camera Mounting Hardware, Installation CD and Manual.

4800

Four Indoor/Outdoor Wired Analog Color Camera Recording System

Four Cameras Included

Back Panel Connections/Ports:
4 BNC in, 4 Audio in, 1 Audio out, 1 USB port, 1USB Mouse, 1 BNC Main out, LAN port, DC power, RS485/ RS422 Alarm in, Alarm out and PTZ connections.

8800

Eight Indoor/Outdoor Wired Analog Color Camera Recording System

Eight Cameras Included

Back Panel Connections/Ports:
8 BNC in, 1 VGA out, 1 VGA Audio in, 1 USB port, 1USB Mouse, 1 BNC Main out, LAN port, DC power, RS485/ RS422 Alarm in, Alarm out and PTZ connections.

P-520

Indoor/Outdoor Wired Analog Color Camera

- Indoor/outdoor night vision color camera (IP44 rating)
- Built-in microphone
- 400 TV lines for clear resolution
- Compatible with other First Alert wired security systems

Includes:
1 Camera, 100 ft. BNC AV cable, Power Supply, Camera Mounting Hardware, Manual.

Compact Size
1-1/2" high

P-500

Mini Indoor Wired Analog Color Camera

- Discrete placement and surveillance
- Compact size can easily be positioned anywhere
- Indoor color camera
- Built-in microphone
- 380 TV lines for clear resolution
- Compatible with other First Alert wired security systems

Includes:
1 Camera, 18 ft. AV/Power cable, Power Supply, Camera Mounting Hardware, Manual.

Available August 2011

BNC-50, BNC-100, BNC-300

RG59 COAX VIDEO & DC POWER CABLES

- Solid copper conductor for less voltage drop and better signal over longer distances - easier to handle
- Combined video and DC power in one cable
- Double shielded with aluminum foil insulation and braiding
- BNC Male connections on video cable and 1 jack male, 1 plug female on DC power cable (2.1mm I.D./5.5mm O.D.)
- 50' (BNC-50), 100' (BNC-100) and 300' (BNC-3-00) lengths

Notes:
BNC-50: 50' cable, BNC-100: 100' cable, BNC-300: 300' cable, .

BNC-100F

RG59 FIRE RATED COAX VIDEO & DC POWER CABLE

Same features as above plus:

- FT-4/CMR UL approved for in-wall installations
- 100' length

D-575

Indoor/Outdoor 2.4 GHz Digital Wireless Color Camera with Receiver

- 4 channel digital wireless M-JPEG recording system
- 2.4 GHz secure digital signal using frequency hopping spread spectrum (FHSS) technology
- Indoor/outdoor night vision color camera (IP66 rating) with passive IR motion detection and audio surveillance
- Wireless transmission up to 750 ft. line of sight
- 2GB SD card included, up to 32GB SD/SDHC compatible
- Expandable up to a total of four D-520 cameras

Includes:

- 1 Camera, 2.4 GHz wireless recording system, 2GB SD card, AV cable, camera stand & mounting hardware, manual.

Note:
In some states it is illegal or it requires permission from one or both parties to record someone's voice. Be sure to check with state or local authorities in your area for laws that may affect your installation

DW-700, DW-702

Indoor/Outdoor 2.4 GHz Digital Wireless Color Camera with 7" Digital Display

- 4 channel digital wireless M-JPEG recording system
- 2.4 GHz secure digital signal using frequency hopping spread spectrum (FHSS) technology
- Indoor/outdoor night vision color camera (IP66 rating) with passive IR motion detection
- Audio surveillance
- Wireless transmission up to 750 ft. line of sight
- 2GB SD card included, up to 32GB SD/SDHC compatible
- Expandable up to a total of four D-520 cameras

Includes:

DW-700: 1 camera, DW-702: 2 Cameras, 2.4 GHz wireless recording system with 7" display, 2GB SD card, AV cable, camera stand & mounting hardware, manual.

Available August 2011

Tip:
Perfect for placement in Lighting Showrooms or at the counter area for impulse sales.

D-520

Indoor/Outdoor 2.4GHz Digital Wireless Color Camera

- 2.4 GHz secure digital signal using frequency hopping spread spectrum (FHSS) technology
- Indoor/outdoor night vision color camera (IP66 rating) with motion detection and audio surveillance
- Wireless transmission up to 750 ft. line of sight
- Use with First Alert D575, DW-700 and DW-702 digital wireless camera recording systems

Includes:

- 1 Camera, power supply, camera stand & mounting hardware, manual.

DWB-740

Indoor 2.4GHz Digital Wireless Family Surveillance Camera & 2.5" LCD Monitor

- 4-channel digital wireless M-JPEG recording system
- VOX voice activated recording
- 2.4 GHz secure digital signal using frequency hopping spread spectrum (FHSS) technology
- Indoor night vision color camera with audio surveillance
- Wireless transmission up to 750 ft. line of sight
- 3 Musical Lullabies, Playing Time 5 - 7 Minutes Each
- 2GB SD card included, up to 32GB SD/SDHC compatible
- Expandable up to a total of four DWB-700 cameras

Includes:

2.5" Monitor/Receiver, 1 digital wireless camera, 2GB SD card, power supply, camera stand & mounting hardware, manual.

DWB-700

Indoor 2.4GHz Digital Wireless Camera

- 2.4 GHz secure digital signal using frequency hopping spread spectrum (FHSS) technology
- Indoor night vision color camera with audio surveillance
- Wireless transmission up to 750 ft. line of sight
- Use with First Alert DWB-740 family surveillance kit

Includes:

1 digital wireless camera, power supply, camera stand & mounting hardware, manual.

DC-1

INDOOR/OUTDOOR DECOY CAMERA

- Cost effective deterrent
- Equipped with 30 infrared LEDs (non-working)
- Indoor/outdoor use

Tip:
Decoy Cameras act as a great deterrent if you don't have real cameras or they can make your live system seem to be more extensive.

YS-1

FIRST ALERT SIGN

- Inform potential intruders your premises are under 24 hour surveillance with First Alert security cameras
- Indoor/outdoor use
- Includes sign, post and (4) anti-theft deterrent stickers

INGRESS PROTECTION (IP RATINGS)

The IP rating is used to specify the strength of the enclosure that surrounds electronic equipment and is determined by specific tests. Each IP rating consists of using two separate measures. The first is protection against solids; the second number is protection against liquids. So therefore an IP rating of 65 is totally protected against dust and is protected against low pressure jets of water from all directions with limited ingress permitted.

IP Ratings			
Level of Protection against solid objects, materials or dust		**Level of Protection against water or liquids**	
0	No protection	0	No protection
1	Protected against solid objects down to 50 mm	1	Protection against vertically falling drops of water (e.g. condensation)
2	Protected against solid objects down to 12 mm	2	Protection against direct sprays of water up to 15 degrees from vertical
3	Protected against solid objects down to 2.5 mm	3	Protection against direct sprays of water up to 60 degrees from vertical
4	Protected against solid objects down to 1 mm	4	Protection against water sprayed from all directions – limited ingress permitted
5	Protected against dust, limited ingress (no harmful deposit)	5	Protected against low pressure jets of water from all directions – limited ingress permitted
6	Totally protected against dust	6	Protected against low pressure jets of water, limited ingress permitted (e.g. ship deck)
		7	Protected against the effect of immersion between 15cm and 1m
		8	Protected against long periods of immersion under pressure

RECORDING TIME CAPACITIES (M-JPEG)

SD Card Capacity	320 x 240 (QVGA)	640 x 480 (VGA)	1,280 x 720 (HD)
1G	29 min 30 sec	10 min 40 sec	2 min
2G	1 h	21 min 40 sec	8 min 20 sec
8G	4 h 1 min	1 h 27 min	33 min 33 sec
16G	8 h 5 min	2 h 55 min	1 h 7 min
32G	16 h 14 min	5 h 51 min	2 h 15 min

Video Format	Resolution	Recording Frame Ratio (FPS)	Bit Rate (kbps)	Space Usage/ Hour (MB/h)
NTSC	CIF (320x240)	30	768	323M
NTSC	CIF (320x240)	30	512	225M
NTSC	CIF (320x240)	30	384	168.7M
NTSC	CIF (320x240)	30	256	112.5M
NTSC	CIF (320x240)	30	128	56M

Example: 4 channel DVR, at 768kbps bit rate, an hour recording for 4 channels is 1.29GB, or a 500GB HDD can probably record for about 15 days

Note: All numbers are approximate and are for estimating only. Many factors influence actual storage capacities including size of data, quality, aspect ratio and compression used.

COMPRESSION FORMATS

The foundation of these standards is JPEG, named after the group that developed it in the mid-1980s, the Joint Photographic Experts Group. The first JPEG standard was released in 1991. Another group of developers, in the late 1980s, developed a standard for compressing moving pictures and audio - the Motion Picture Experts Group, hence the name MPEG. MPEG-4 was released in 1998. H.264/AVC (for advanced video coding), is the latest block-oriented motion-compensation-based codec standard developed by the ITU-T Video Coding Experts Group (VCEG) together with the ISO/IEC Moving Picture Experts Group (MPEG), and it was the product of a partnership effort known as the Joint Video Team (JVT). The ITU-T H.264 standard and the ISO/IEC MPEG-4 AVC standard (formally, ISO/IEC 14496-10 - MPEG-4 Part 10, Advanced Video Coding) are jointly maintained so that they have identical technical content. H.264 is used in such applications as Blu-ray Disc, videos from You Tube and the iTunes Store, DVB broadcast, direct-broadcast satellite television service, cable television services, and real-time video conferencing. The standardization of the first version of H.264/AVC was completed in May 2003. Version 13 was implemented in March 2010.

H.264 provides good video quality at substantially lower bit rates than previous standards. Basically it compares compressed images using the first compressed image as a reference frame, then it sends only the parts of the following images that differ from the reference image. This substantially lowers the amount of data that needs to be transferred making it more attractive for video network delivery and the delivery of HD video. H.264 is an open format and is available for anyone to implement.

M-JPEG is the most widely used picture compression format used today and is a video codec where each frame is separately compressed into a JPEG image. The resulting quality of video compression is independent from the motion in the image. Each individual image is a complete JPEG compressed image, unlike H.264 which uses reference images.

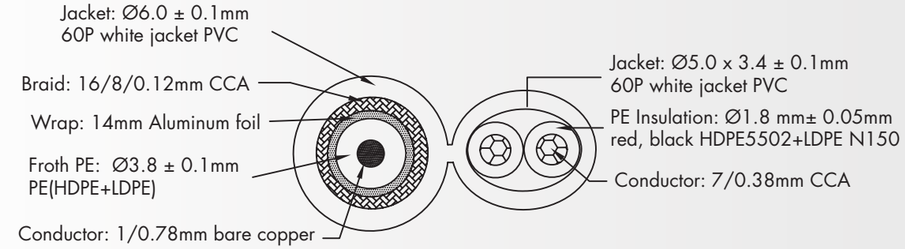
M-JPEG is ideal for courtroom evidence, whereas H.264 could be challenged as every frame is not a complete picture. M-JPEG technology is simpler however uses more storage space. As images are compressed, clarity can suffer. A balance needs to be drawn at reducing image size and keeping the image clear. Latest versions of H.264 improve clarity.

CAMERA MOUNTING OPTIONS

Most First Alert cameras can be either ceiling or wall mounted by simply reversing the mounting camera stand. Holes are provided on both the top and bottom of the camera housing to accommodate most mounting requirements. It's important the camera is mounted correctly to ensure the image is not upside down as the camera lens can only be positioned one way.

COAX CABLE CONSTRUCTION

Not all coax cables are created equally. First Alert's RG59 combined coax video and DC power cables use a solid copper conductor for less voltage drop and better signal over longer distances. This also makes the cable easier to handle versus other lower quality copper clad steel cables as it is less rigid and will not remain coiled. In addition, the cables are double shielded with aluminum foil insulation and braiding to help protect the video signal from interference. Each cable comes with BNC Male connections on each end of the video cable and 1 jack male, 1 plug female on the ends of the DC power cable (2.1mm I.D./5.5mm O.D.). We also supply two adaptor plugs for your convenience. One is a BNC female to BNC female adaptor to provide a way to connect two lengths of cable together. The other is a BNC Female to RCA male connector to attach cable to a TV RCA female (Yellow Video in) input. In addition, we offer cable that is fire rated FT-4/CMR UL approved for in-wall installations. All of these features ensure your customers of the highest quality installation.



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